

- II. *On certain species of Pericopides in the Collection of Mr. W. Wilson Saunders: with a List of the described species pertaining to that Group.* By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

[Read 1st January, 1872.]

MR. SAUNDERS having kindly allowed me to describe the new species of *Pericopides* in his Collection, I have taken this opportunity of correcting one or two errors to which Mr. Brown, his Curator, has called my attention.

Upon comparing the types of *P. bivittata* in the British Museum, and *P. disjuncta* in the Collection of Mr. Saunders, it was found that the two forms are specifically identical, the differences between them being merely individual in character.

The genus *Daritis* is identical with *Pericopis* in structure, and I think it quite likely that *D. marginalis* may prove to be the female of *P. dissimulans*.

My *P. lunifera* (type in Coll. Saunders) is *P. turbida*, of Hübner's *Zuträge*; the latter was placed amongst the varieties of the species in the National Collection, *P. Aglaura* and *P. tricolora* being considered as opposite sexes of the typical form.

The following are new species :—

Genus ESTHEMA.

Esthema confluens (Felder, *in litt.*).

Alæ supra cœruleo-nigræ; anticæ fascia postmediana subhyalina alba, introrsum obliqua, extrorsum arcuata a venis nigris interrupta; posticæ areis basali et interna nitente virescentibus, fascia media lata, utrinque subito angustata, subhyalina, alba, a venis nigris interrupta: corpus nitide virescens, capite albo-punctato, antennis nigro-fuscis.

Alæ subtus nigrescentes, area basali viridi-striata: corpus griseum a latere virescens, thorace albo-punctato, abdomine albido annulato.

Hab.—Villa Nova.

Allied to *E. speciosa*.

GENUS PERICOPIS.

1. *Pericopis noctuities*.

Alæ anticæ supra subhyalinæ, fumato-fuscæ; macula discoidali rotundata nigro-fusca albido-cincta, altera disco-cellulari quadrata fusca; fascia interna cuneiformi nigro-fusca; area apicali et margine externo decrescente nigrescente, extrorsum et introrsum albicante: posticæ niveo-hyalinæ, margine externo et apice nigris; costa cinerea: corpus thorace piceo-fusca, collo albido, abdomine cinereo ad basin nigro-fasciolato, ano aurantiaco: alæ subtus albicantes, omnes macula basali coccinea, aliter velut supra: corporis abdomine albicante.

Hab.—Minas Geraes? (Rogers).

Allied to *P. parnassiodes*, Wlk.

2. *Pericopis rubripicta*.

Alæ supra fuscæ; anticæ vena costali, macula quadrata discoidali subterminali, striga mediana submediana a basi ad marginis externi medium currente in ramum primum medianum area cinerea interrupta, a margine ad venam costalem fascia obliqua subapicali currente, pallide sulphureis; venis nigris; basi flavescente; macula discoidali altera discocellulari et tertia subanali squamosis coccineis; posticæ basi albido rorata, macula bifida discoidali et altera trifida subapicali sulphureis; serie punctorum quatuor rubrorum apicalium oblique positorum et plaga magna quadrifida subanali cuneiformi roseo-rubra: corpus thorace fusco, collo tegulisque flavis; abdomine nigro a latere flavo sex-fasciolato, ano aurantiaco: alæ subtus fasciis maculisque distinctioribus, omnes macula basali coccinea: corpus nigro-fuscum, abdomine a latere maculis sex aureo-flavis, fasciolas terminantibus, ano aurantiaco.

Hab.—Bogota.

Belongs to the *sacrifica* group, and comes near *P. Woodii*, Butler.

3. *Pericopis fenestrata*.

♂ Affinis *P. Theti*, ♂ (*Daritis Thetis*, Wlk.), alis minoribus, anticis costa longiore margine externo magis

obliquo, interno brevior; fasciis hyalinis multo latioribus; dimidio basali cellæ discoidalis hyalino; area externa pallidior, punctis septem submarginalibus hyalinis; posticæ strigula discocellulari minus angulata; area externa aurantiaca angustiore introrsum vix nigro limitata: alæ subtus dilutiores.

Hab.—S. Geronimo, Vera Paz (Salvin).

A local form of the Mexican *P. Thetis*.

The *Pericopides*, according to the original arrangement in the second volume of Mr. Walker's 'Lepidoptera Heterocera,' were an ill-defined group, probably intended to extend from *Esthema* to the end of *Chrysauge*; but in the seventh volume, p. 1653, the limits of the group are defined, a family being formed under the title of *Pericopidæ*, for the reception of the following genera:—*Esthema*, *Heleona*, *Hyalurga*, *Cistidia*, *Dysphania*, *Pericopis*, *Phaloë*, *Phaloësia*, *Composia*, and *Eucyane*; Mr. Walker remarks that this family 'is connected with the *Melameridæ* by means of *Esthema* and *Eucyane*, and has some affinities with the *Arctiidæ*;' no structural characters are given.

As I do not consider the *Pericopides* to be sufficiently distinct from the *Arctiidæ* to form a separate family, I have hitherto referred them to that family in the vicinity of *Callimorpha*.

Excepting that I should add the two genera *Stenele* and *Hyalosia*, I at present see no objection to the adoption of Mr. Walker's 'Family' as a subgroup of the *Arctiidæ*; the order of affinity in the genera seems to be *Esthema*, *Eucyane*, *Composia*, *Phaloësia*, *Stenele*, *Hyalurga*, *Hyalosia*, *Phaloë*, *Pericopis*: I omit *Heleona*, *Cistidia*, and *Dysphania*, because I have not seen types of these groups, and inasmuch as they are Indo-Australian, whilst all the other genera are Tropical American, it is quite possible that they may prove to be more nearly allied to the *Lithosiidæ** than to the *Arctiidæ*. The whole of the American Genera are characterized by having the antennæ prominently pectinated in the males and nearly

* The *Pericopides* are placed in this family by Mr. Walker, to whom I am indebted for much information respecting the *Heterocera* generally.

simple in the females, the palpi are of moderate length, the last joint being tolerably long and porrect. Dr. Felder remarks (Wien. Ent. Mon. VI.)—"Genera *Esthema*, *Eucyane*, *Anthomyza*,* *Phaloë*, *Phaloësia*, *Diop-tis*, *Composia* et alia ad primi abdominalis annuli latera duo exhibent foramina, operculo globuliformi tecta."

I am acquainted with descriptions of the following species:—

ESTHEMA, Hübner. †

1. *E. bicolora*, Cr. pl. 143, A.
E. dichroa, Hübner, Samml. Ex. Schmett. 1, pl. 187.
Hab.—Para. B. M.
2. *E. Aletta*, Cr. pl. 396, C.
Hab.—Surinam.
3. *E. simulata*, Walk., Cat. Lep. Het. Suppl. p. 1872.
E. mimica, Walk., l. c., p. 1874.
Hab.—Bogota. B. M.
4. *E. plagifera*, Feld., Wien. E. Mon. 6, p. 230.
Hab.—Rio Negro.
5. *E. speciosa*, Walk., Cat. Lep. Het. Suppl. p. 1873.
Hab.—Bogota. B. M.
6. *E. Herrona*, Butler, Ann. & Mag. Nat. Hist. Oct. 1871, p. 285.
Hab.—Bogota. Coll. Saunders.
7. *E. euplæodes*, Butler, loc. cit.
Hab.—Colombia. Coll. Saunders.
8. *E. uraneides*, Butler, loc. cit.
Hab.—Cayenne. Coll. Saunders.
9. *E. confluens*, Butler, ante p. 49.
Hab.—Villa Nova.

* = *Pericopsis*.

† Included two types, *E. dichroa* and *papilionaria*; the latter is now referred to the genus *Cycloria*.

EUCYANE, Hübner.*

1. *E. Celadon*, Cr., pl. 132, E.
Hab.—Surinam.
2. *E. Pylotes*, Dr., Ill. Ex. Ent. 2, pl. 5, fig. 3.
Hab.—Mexico. B. M.
3. *E. glauca*, Cr., pl. 107, E.
Hab.—Para. B. M.
4. *E. amica*, Cr., pl. 370, H.
Hab.—Surinam, Cr. — ? (an sp. dist.?) B. M.
5. *E. Militta*, Cr., pl. 370, I.
Hab.—Surinam.
6. *E. temperata*, Walker, Cat. Lep. Het. 7, p. 1656.
Hab.—Tapajos (Walk.); Ega. B. M.
The Upper Amazons form of *E. glauca*.
7. *E. uranicola*, Walk., Cat. Lep. Het. Suppl. p. 1875.
Hab.—Ega, Bogota. B. M.
8. *E. uranophila*, Walk., *loc. cit.*, p. 1874.
Hab.—St. Paulo, Peru. B. M.
9. *E. uranigera*, Walk., *loc. cit.*, p. 1876.
Hab.—St. Paulo. B. M.
10. *E. Hystaspes*, Butler, P.Z.S., Jan. 1871, p. 82.
Hab.—Venezuela. B. M.
11. *E. Melaxantha*, Hübner, Samml. Ex. Schmett. 1,
pl. 188.
Hab.—Brazil. B. M.

COMPOSIA, Hübner. †

1. *C. Sybaris*, Cr., pl. 71, E.
Bombyx credula, Fabr., E. S. 3, 1, p. 475.
Hab.—Haiti; Jamaica. B. M.

* The first and last species are congeneric.

† Type *C. credula*.

PHALOESIA, Walker.*

1. *P. saucia*, Walk., Cat. Lep. Het. 2, p. 359.
Hab.—Venezuela ; Nicaragua. B. M.
2. *P. Olympia*, Butler, Ann. & Mag. Nat. Hist., Oct. 1871. p. 290.
Hab.—Brazil. Coll. Saunders.

STENELE, Walker. †

1. *S. translata*, Walk., Cat. Lep. Het. 2, p. 356.
Hab.—Para ; Tapajos. B. M.

HYALURGA, Hübner. ‡

1. *H. fenestra*, Linn., M. L. U. p. 372 ; *Hyalurga fenestrigera*, Hübner, Verz. p. 174. *Sphinx (adscita) Egeon*, Cr., pl. 59, B.
Hab.—Venezuela. B. M.
2. *H. Uria*, Butler, Ann. & Mag. Nat. Hist., Oct. 1871, p. 286.
Hab.—Peruvian Amazons. Coll. Saunders.
3. *H. albovitrea*, Walk., Cat. Lep. Het. Suppl. 1, p. 159.
Hab.—Ega. B. M.

GYARA, Walker. §

1. *G. fenestrata*, Walk., Cat. Lep. Het. 4, p. 915.
Hab.—Para ; Rio. B. M.

I doubt the propriety of separating this species from the genus *Hyalurga*, and therefore have not mentioned it in my list of genera, it is referred to the *Pericopides* in Mr. Walker's supplement.

HYELOSIA, Hübner. ||

1. *H. Tiresia*, Cr. 400, B ♂ ; 85, B ♀. *Hyelosia Clio*, Hübner, Verz. p. 174.
Hab.—Para. B. M.

I feel doubtful about the sexes on Cramer's plate being conspecific.

* Type *P. saucia*.

† Type *S. translata*.

‡ Type *H. fenestrigera*=*fenestra*, L.

§ Type *G. fenestrata*.

|| Type doubtful, but, restricted by Mr. Walker, it becomes *H. Tiresia*.

2. *H. heliconides*, Swains., Zool. Ill. 2nd S. pl. 124, fig. 2.

Hab.—Brazil. B. M.

PHALOE, Guérin.

1. *P. cruenta*, Hübner, Samml. Ex. Schmett. Zutr. figs. 329, 330.

Hab.—Brazil. B. M.

The specimens mentioned by Mr. Walker from Venezuela are quite distinct.

PERICOPIS, Hübner.*

1. *P. catilina*, Cr., pl. 79, figs. E. F. *Phalæna catilinaria*, Fabr., Sp. Ins. p. 250. *P. Nasica*, Fabr., Ent. Syst. 3, p. 169. *Pericopis perspicua*, Walk., Cat. Lep. Het. 2, p. 344.

Hab.—Ega; Para. B. M.

2. *P. ignita*, Butler, Fabr., Cat. p. 291; Lep. Exot. pl. 17, fig. 3.

Hab.—Tapajos. B. M.

The two species above mentioned nearly resemble the species of *Hyelosia*.

3. *P. Isse*, Hübner, Samml. Ex. Schmett. 507.

Hab.—Ega. B. M.

4. *P. decisa*, Walk., Cat. Lep. Het. 2, p. 345.

Hab.—Bogota. B. M.

5. *P. angulosa*, Walk., *loc. cit.*

Hab.—Venezuela. B. M.

6. *P. Zerbina*, Stoll, Suppl. Cr., pl. 70, fig. 3.

Hab.—S. America. B. M.

7. *P. Eurocilia*, Cr., pl. 178, C.

Hab.—W. Indies.

8. *P. indecisa*, Walk., Cat. Lep. Het. 2, p. 347.

Hab.—Rio Janeiro. B. M.

9. *P. subguttata*, Walk., *loc. cit.*

Hab.—Rio Janeiro. B. M.

* Four congeneric species as types.

10. *P. bivittata*, Walk., *loc. cit.*, p. 348. *P. disjuncta*,
Walk., *l. c.*, 7, p. 1655.
Hab.—Venezuela. B. M.
11. *P. humeralis*, Walk., *loc. cit.*
Hab.—? B. M.
12. *P. nubila*, Walk., *loc. cit.*, p. 349.
Hab.—Brazil. B. M.
13. *P. patula*, Walk., *loc. cit.*
Hab.—Bolivia. B. M.
14. *P. submarginata*, Walk., *loc. cit.*, p. 350.
Hab.—Brazil. B. M.
15. *P. parnassiodes*, Walk., *loc. cit.*
Hab.—Brazil. B. M.
16. *P. Aglaura*, Cr., pl. 263, F, ♂.
Hab.—Venezuela. B. M., ♂, ♀.
17. *P. Jansonis*, Butler, Lep. Ex. pl. 17, figs. 4, 5.
Hab.—Nicaragua. B. M., ♀.
18. *P. turbida*, Hübn., Samml. Ex. Schm. Zutr. figs.
529, 30. *P. lunifera*, Butler, Ann. & Mag.
Nat. Hist. 1871, p. 288.
Hab.—Bahia. B. M., ♀.
19. *P. tricolora*, Cr., pl. 263, E.
Hab.—Para; Brazil. B. M., ♂, ♀.
20. *P. leucophæa*, Walk., Cat. Lep. Het. 2, p. 352.
Hab.—Mexico. B. M.
21. *P. rosina*, Butler, P.Z.S. p. 82 (1871); Lep. Ex.
pl. 30, fig. 1.
Hab.—Ega. B. M.
22. *P. subapicalis*, Walk., Cat. Lep. Het. 2, p. 352.
Hab.—Brazil. B. M.
23. *P. larvata*, Walk., *loc. cit.*, 7, p. 1654.
Hab.—Amazons Valley. Coll. Saunders.
24. *P. rorata*, Walk., Cat. Lep. Het. Suppl. 1, p. 154.
Hab.—Bogota. Coll. Birchall.
Seems to come near *P. parnassiodes*.
25. *P. dissimulata*, Walk., *loc. cit.*, p. 155.
Hab.—Bogota. B. M.

26. *P. dissimulans*, Walk., *loc. cit.*
Hab.—Bogota. B. M.
27. *P. Arema*, Boisd., Lep. Guat. p. 85 (*Thebrone*).
Hab.—Nicaragua; Venezuela.
 Evidently allied to the preceding species.
28. *P. rubrimargo*, Boisd., Lep. Guat. p. 89 (*Thebr.*).
Hab.—Honduras and Mexico.
 Evidently near *P. leucophæa*.
29. *P. salvatoria*, Boisd., Lep. Guat. p. 86 (*Aphisaon*).
Hab.—Honduras and Guatemala.
 Also near *P. leucophæa*.
30. *P. sacrificæ*, Hübn., Ex. Schmett. Zutr. 473, 4 ♀.
Hab.—Ipaunema. Coll. Saunders.
 The male is smaller than the female, and has the bands of front-wings and the whole of hind-wings, except the margin, hyaline-white.
31. *P. Woodii*, Butler, Ann. and Mag. Nat. Hist. 3rd S., Vol. 20, p. 218, pl. 4, figs. 2, 3 (*Mazæras Woodii*).
Hab.—Bahia. Coll. Wood.
32. *P. Thetis*, Klug, Neuere Schmett. 6, 4, figs. 1, 2.
Hab.—Mexico. B. M.
33. *P. marginalis*, Walker, Cat. Lep. Het. 3, p. 618.
Hab.—Venezuela. B. M.
 Possibly ♀ of *P. dissimulans*, mentioned above.
34. *P. Hydra*, Butler, Ann. & Mag. Nat. Hist. Oct. 1871, p. 286.
Hab.—Ecuador. Coll. Saunders.
35. *P. Ithrana*, Butler, *loc. cit.*
Hab.—Amazons. Coll. Saunders.
36. *P. Kenara*, Butler, *loc. cit.*, p. 287.
Hab.—Sta Martha. Coll. Saunders.
37. *P. fulgorata*, Butler, *loc. cit.*
Hab.—Para. Coll. Saunders.
38. *P. Hazara*, Butler, *loc. cit.*
Hab.—Villa Nova and Ecuador. Coll. Saunders.

39. *P. formosissima*, Butler, *loc. cit.*, p. 288.
Hab.—Colombia and Ecuador. Coll. Saunders.
40. *P. Thyridina*, Butler, *loc. cit.*, p. 289.
Hab.—Ecuador. Coll. Saunders.
41. *P. vestalis*, Butler, *loc. cit.*
Hab.—Brazil. Coll. Saunders.
42. *P. Holofernes*, Butler, *loc. cit.*
Hab.—Minas Geraes. Coll. Saunders.
43. *P. Irenides*, Butler, *Cist. Ent.* 4, p. 88.
Hab.—Cartago, Costa Rica. Coll. Janson.
44. *P. Leonina*, Butler, *loc. cit.*, p. 89.
Hab.—Cartago, Costa Rica. Coll. Janson.
45. *P. noctuities*, Butler, *ante* p. 50.
Hab.—Minas Geraes (?). Coll. Saunders.
46. *P. rubripicta*, Butler, *l. c.*
Hab.—Bogota. Coll. Saunders.
47. *P. fenestrata*, Butler, *l. c.*
Hab.—S. Geronimo. Coll. Saunders.
48. *P. Salvini* (Felder, MS.) Butl., *Ann. & Mag. Nat. Hist.*, Oct. 1871, p. 290.
Hab.—Polochic Valley. Coll. Saunders.
49. *P. mimica* (Felder, MS.), Butl., *loc. cit.*
Hab.—Upper Orinoco. Coll. Saunders.
50. *P. Histrio* (Felder, MS.) Butl., *loc. cit.*
Hab.—Villa Nova, Coll. Saunders; St. Paulo, B. M.

In the above List, I have not attempted any arrangement according to affinities, but to the best of my belief, I have not overlooked anything; however, without going carefully through the whole of the Macro-Lepidoptera, it would be impossible to be certain that species so subject to mimetic modification as the *Pericopides*, have not here and there been misplaced, and thus passed by.
